

**IN THE SPECIFICATION:**

Page 1, please replace paragraph in the section headed: FIELD OF THE INVENTION with the following new paragraph:

--The present invention relates to a new[[,]] ~~microbiological~~[[,]] method for the production of  $\alpha$ -L-aspartyl-L-phenylalanine (Asp-Phe) from the substrates L-aspartic acid (L-Asp) and L-phenylalanine (L-Phe). The present invention also relates to novel DNA fragments or combination of DNA fragments encoding a new Asp-Phe dipeptide synthetase, micro-organisms containing such DNA fragments, as well as to the new Asp-Phe dipeptide synthetases itself.--

Page 3, please replace the paragraph beginning on line 8, with the following new paragraph:

--Surprisingly, the inventors now found a new, and promising alternative ~~microbiological~~ method the production of  $\alpha$ -L-aspartyl-L-phenylalanine (Asp-Phe) from the substrates L-aspartic acid (L-Asp) and L-phenylalanine (L-Phe) wherein the substrates are contacted, in the presence of an effective amount of adenosine-triphosphate (ATP), with a non-ribosomal dipeptide synthetase comprising two minimal modules connected by one condensation domain wherein the N-terminal module of these modules is recognising L-aspartic acid and the C-terminal module of these modules is recognising L-phenylalanine and is covalently bound at its N-terminal end to the condensation domain, and wherein each of these minimal modules is composed of an adenylation domain and a 4'-phosphopantetheinyl cofactor containing thiolation domain, and that the  $\alpha$ -L-aspartyl-L-phenylalanine (Asp-Phe) formed is recovered.--

Page 9, please replace the Table 1, with the following new table including sequence ID numbers:

| Domain       | Core(s)<br>Note: Former<br>nomenclature is<br>given in brackets | Consensus sequence                      |
|--------------|---|---|
| Adenylation  | A1  | L(TS)YxEL (SEQ ID NO:1)                 |
|              | A2 (core 1)   | LKAGxAYL(VL)P(LI)D (SEQ ID NO:2)        |
|              | A3 (core 2)   | LAYxxYTSG(ST)TGxPKG (SEQ ID NO:3)       |
|              | A4  | FDxS (SEQ ID NO:4)                      |
|              | A5  | NxYGPTE (SEQ ID NO:5)                   |
|              | A6 (core 3)   | GELxIxGxG(VL)ARGYL (SEQ ID NO:6)        |
|              | A7 (core 4)   | Y(RK)TGDL (SEQ ID NO:7)                 |
|              | A8 (core 5)   | GRxDxQVKIRGxRIELGEIE (SEQ ID NO:8)      |
|              | A9  | LpxYM(IV)P (SEQ ID NO:9)                |
|              | A10   | NGK(VL)DR (SEQ ID NO:10)                |
| Thiolation   | T (core 6)  | DxFFxxLGG(HD)S(LI) (SEQ ID NO:11)       |
| Condensation | C1  | SxAQxR(LM)(WY)XL (SEQ ID NO:12)         |
|              | C2  | RHExLRTxF (SEQ ID NO:13)                |
|              | C3 (His)  | MHHxISDG(WV)S (SEQ ID NO:14)            |
|              | C4  | YxD(FY)AVW (SEQ ID NO:15)               |
|              | C5  | (IV)GxFVNT(QL)(CA)xR<br>(SEQ ID NO: 16) |
|              | C6  | (HN)QD(YV)PFE (SEQ ID NO:17)            |
|              | C7  | RDxSRNPL (SEQ ID NO:18)                 |
| Thioesterase | TE  | G(HY)SxG (SEQ ID NO:19)                 |

Page 13, please delete the paragraph beginning on line 12, and replace it with the following paragraph:

-- All known bacterial and some fungal peptide synthetase modules that incorporate the last amino acid into the growing peptide chain show a region with a thioesterase-like function. These regions of approximately 250 amino acids are located at the C-terminal end of the amino acid recognising modules. These thioesterase-like regions are integrated regions which exhibit homology to thioesterase-like proteins, and therefore also are referred to as the thioesterase domain ((integrated) TE-domain). All these integrated TE-domains contain an active site serine residue, which is part of the core motif GxSxG (**SEQ ID NO: 20** (see table 1)). --

Page 21, immediately following the paragraph beginning on line 3, please add the following sentence:

--THIS SPACE IS INTENTIONALLY LEFT BLANK.--

Please delete the paragraph on page 31, beginning on line 17, and replace it with the following paragraph:

-- A 4934 bp fragment comprising regions from the *srfB* locus from chromosomal *Bacillus subtilis* ATCC 21332 DNA was amplified (PCR) using the following primers: 5' TAA GCA TGC TGC TTT CAT CTG CAG AAA C (5' *asp-leu-SphI-srfB2*) (**SEQ ID NO:21**), and 3' AAT GGA TCC TTC GGC ACG CTC TAC (3' *asp-leu-BamHI-srfB3*) (**SEQ ID NO:22**).--

Please delete the paragraph on page 32, beginning on line 20, and replace it with the following paragraph:

-- A 1894 bp chromosomal DNA-fragment from *Bacillus brevis* ATCC 8185 DNA was amplified (PCR) using the following primers: 5' ATT TGG TCA CCA ATC TCA TCG ACA A (5' *BstEII-TycA-NLID*) (**SEQ ID NO:23**),

and

5' ATA GGA TCC TGT ATT CGT AAA GTT TTT C (3'-PheAT-*Bam*HI) (**SEQ ID NO:24**).

Please replace the paragraph on page 33, beginning at line 27, and replace it with the following new paragraph:

-- A 910 bp chromosomal DNA-fragment from *Bacillus subtilis* ATCC 21332 DNA was amplified (PCR) using the following primers:  
5' ATA ATC GAT AAT CGC ACA AAT ATG GTC (5' TE-*srjC1-Cla*I) (**SEQ ID NO:25**) and  
3' ATA AGA TCT AAC AAC CGT TAC GGT TTG TGT (3' int TE-*srjC1-Bgl*II) (**SEQ ID NO:26**).--